

# PRODUCT INFORMATION

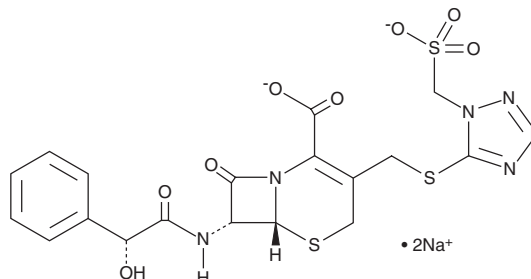


## Cefonicid (sodium salt)

Item No. 18745

**CAS Registry No.:** 61270-78-8  
**Formal Name:** (6R,7R)-7-[[[(2R)-2-hydroxy-2-phenylacetyl]amino]-8-oxo-3-[[[1-(sulfomethyl)-1H-tetrazol-5-yl]thio]methyl]-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, disodium salt

**Synonym:** Monocid  
**MF:**  $C_{18}H_{16}N_6O_8S_3 \cdot 2Na$   
**FW:** 586.5  
**Purity:**  $\geq 98\%$   
**UV/Vis.:**  $\lambda_{max}$ : 269 nm  
**Supplied as:** A crystalline solid  
**Storage:**  $-20^{\circ}C$   
**Stability:**  $\geq 4$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Cefonicid (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the cefonicid (sodium salt) in the solvent of choice, which should be purged with an inert gas. Cefonicid (sodium salt) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of cefonicid (sodium salt) in these solvents is approximately 5 and 2 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of cefonicid (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of cefonicid (sodium salt) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Cefonicid is a second-generation cephalosporin antibiotic.<sup>1</sup> Like other cephalosporins, cefonicid interferes with cell wall biosynthesis in bacteria, leading to lysis of the infectious organism. It is a broad-spectrum antibiotic and has a prolonged serum elimination half-life in animals.<sup>1</sup>

### Reference

1. Kalman, D. and Barriere, S.L. Review of the pharmacology, pharmacokinetics, and clinical use of cephalosporins. *Texas Heart Institute Journal* **17(3)**, 203-215 (1990).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/11/2022

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM